

4-18-05

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PTO/SB/21 (09-04)

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/826,583
Filing Date	April 6, 2001
First Named Inventor	Unger, Marc
Art Unit	3753
Examiner Name	Chambers, A. Michael
Attorney Docket Number	20174C-003010US

ENCLOSURES (Check all that apply)

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Reply
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input type="checkbox"/> Information Disclosure Statement

<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input checked="" type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation
Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund
<input type="checkbox"/> CD, Number of CD(s) _____
<input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Exhibits 1, 2 and 3
Return Postcard |
|---|--|---|

Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

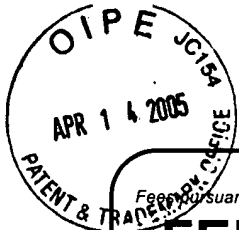
Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Patrick M. Boucher		
Date	April 14, 2005	Reg. No.	44,037

CERTIFICATE OF TRANSMISSION/MAILING

Express Mail Label: EV 470766885 US

I hereby certify that this correspondence is being deposited with the United States Postal Service with "Express Mail Post Office to Address" service under 37 CFR 1.10 on this date April 14, 2005 and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Nina L. McNeill	Date	April 14, 2005



PTO/SB/17 (12-04)

Effective on 12/08/2004.

Fee pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 130)

Complete if Known

Application Number	09/826,583
Filing Date	April 6, 2001
First Named Inventor	Unger, Marc
Examiner Name	Chambers, A. Michael
Art Unit	3753
Attorney Docket No.	20174C-003010US

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038****FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25	
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100	
Multiple dependent claims	360	180	

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
-20 or HP = _____ x _____ = _____						

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
-3 or HP = _____ x _____ = _____			

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____				

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

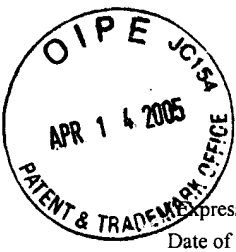
Other: Petition Under 37 C.F.R. 1.181(A)(1)

Fees Paid (\$)

130

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	44,037	Telephone	303-571-4000
Name (Print/Type)	Patrick M. Boucher			Date	April 14, 2005



Express Mail Label No. EV470766885US
Date of Deposit April 14, 2005

PATENT
Docket No.: 20174C-003010US
Client Ref. No.: CIT-3016-CIP1-CIP1

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Commissioner for Patents
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Alexandria, VA 22313-1450

By: Nina L. McNeill
Nina L. McNeill

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Chambers, A. Michael

Art Unit: 3753

PETITION UNDER 37 C.F.R 1.181(A)(1)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby petition that acknowledgement of consideration of references cited in certain Information Disclosure Statements be provided by (1) returning a copy of relevant forms PTO/SB/08A and PTO/SB/08B signed by the Examiner to Applicants and (2) printing an identification of those references on the patent that issues from the captioned application.

Statement of Facts

1. The captioned application was filed on April 6, 2001.
2. The first Office Action on the merits was mailed by the Office on December 16, 2002.
3. On November 21, 2001, i.e. before the mailing of the first Office Action, a Supplemental Information Disclosure Statement Under 37 CFR §1.97 and §1.98 was filed by first class mail. A postcard stamped by the Office acknowledging receipt on January 4, 2002 was returned. A true copy of the Supplemental Information Disclosure Statement Under 37 CFR §1.97 and §1.98 and stamped returned postcard are attached as Exhibit 1.
4. On December 14, 2001, i.e. before the mailing of the first Office Action, another Supplemental Information Disclosure Statement Under 37 CFR §1.97 and §1.98 was filed by first class mail. A postcard stamped by the Office acknowledging receipt on January 23, 2002 was returned. A true copy of the Supplemental Information Disclosure Statement Under 37 CFR §1.97 and §1.98 and stamped returned postcard are attached as Exhibit 2.
5. After a review of Applicants' file, duplicates of these Information Disclosure Statements were filed as courtesy copies on December 8, 2004 with a request that acknowledgment of their consideration be provided to Applicants. A true copy of this filing is attached as Exhibit 3.
6. This request was refused by the Office in a communication mailed March 25, 2005 indicating that the duplicate Information Disclosure Statements would not be considered because they were not accompanied by the certification set forth in 37 C.F.R. §1.97(e) and appropriate fee.

7. A Notice of Allowance was mailed on November 18, 2004 and the Issue Fee was paid on February 22, 2005.

Request for Consideration of Information Disclosure Statements

“An information disclosure statement shall be considered by the Office if filed by the applicant ... [b]efore the mailing of a first Office action on the merits.” 37 C.F.R.

§1.97(b)(3). Since the Supplemental Information Disclosure Statements filed on November 21, 2001 and December 14, 2001 were filed before the mailing of a first Office Action on the merits, the Office is obliged to consider them. Evidence of proper filing and receipt by the Office of these Supplemental Information Disclosure Statements before the mailing of the first Office Action has been provided in Exhibits 1 and 2 (see ¶¶ 3 and 4 above).

It is respectfully believed that the refusal to consider these Supplemental Information Disclosure Statements as communicated by the Office on March 25, 2005 is based on an incorrect conclusion that they represented new Information Disclosure Statements rather than duplicates of previously filed Information Disclosure Statements. No certification nor fee is required since they were properly filed and received by the Office before the mailing of a first Office Action on the merits. Applicants accordingly request that acknowledgment of their consideration be returned and that the references cited therein be identified among the “references cited” on the patent that issues from the application.


The undersigned discussed the above facts with the Examiner on April 14, 2005, and agreed to submit this petition. The petition fee of \$130 under 37 C.F.R. §1.17(h) is submitted concurrently herewith, although it is believed that the fee is properly waived. Should

Marc Unger et al.
Application No.: 09/826,583
Page 4

PATENT

the Office determine that any other fees are due for consideration of this petition, it is authorized to charge them to Deposit Account No. 20-1430.

Respectfully submitted,


Patrick M. Boucher
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: (415) 576-0200
Fax: (415) 576-0300
PMB:pmb

60468681 v1

TO THE U.S. PATENT AND TRADEMARK OFFICE:
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Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97 and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

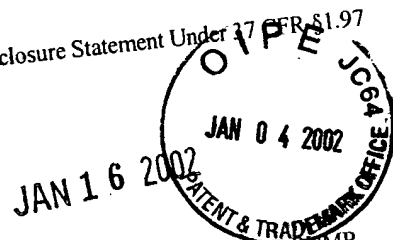
Applicant: Unger et al.
Application No.: 09/826,583
Filing Date: April 6, 2001
For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 11/21/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US



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- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.,
Application No.: 09/826,583
Filing Date: April 6, 2001.
For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 11/21/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US



EV 470766885 US

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Label 11-F June 2002



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Date In Mo. Day Year	<input type="checkbox"/> 12 Noon <input type="checkbox"/> 3 PM	Postage \$		Delivery Attempt	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature	
Time In <input type="checkbox"/> AM <input type="checkbox"/> PM	Military <input type="checkbox"/> 2nd Day <input type="checkbox"/> 3rd Day	Return Receipt Fee		Delivery Date	Time <input type="checkbox"/> AM <input type="checkbox"/> PM	Employee Signature	
Weight lbs. ozs.	Int'l Alpha Country Code	COD Fee	Insurance Fee	<input type="checkbox"/> WAIVER OF SIGNATURE (Domestic Only) Additional merchandise insurance is void if waiver of signature is requested. I wish delivery to be made without obtaining signature of addressee or addressee's agent. (If delivery employee judges that article can be left in secure location) and I authorize that delivery employee's signature constitutes valid proof of delivery.			
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday	Acceptance Clerk Initials	Total Postage & Fees \$		<input type="checkbox"/> NO DELIVERY <input type="checkbox"/> Weekend <input type="checkbox"/> Holiday			
CUSTOMER USE ONLY				CUSTOMER USE ONLY			
METHOD OF PAYMENT: Express Mail Corporate Acct. No.				Federal Agency Acct. No. or Postal Service Acct. No.			
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PMB/nlm 20174C-003010US							
PRESS HARD. You are making 3 copies.				FOR PICKUP OR TRACKING CALL 1-800-222-1811 www.usps.com			

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F:02 T:21



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RPTO/SB/21 (08-00)

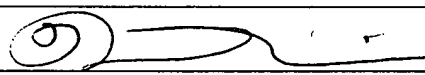
Approved for use through 10/31/2002. OMB 0651-0031

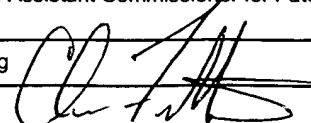
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/826,583	
	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Return receipt postcard
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. Total number of pages <u>does not</u> include cited references.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm and Individual name	Townsend and Townsend and Crew LLP Kent J. Tobin Reg No. 39,496
Signature	
Date	November 21, 2001

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: November 21, 2001			
Typed or printed name	Chris Fitting		
Signature		Date	November 21, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3185609 v1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A/08B are being called to the attention of the Examiner. In accordance with CFR §1.98(d), copies of the references can be found in Application No. 09/724,784, filed November 28, 2000 (Attorney docket No. 20174C-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
KJT:crf

PA 3184064 v1

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PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	09/826,583
Filing Date	04/06/01
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003010US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (08-00)



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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/826,583
		Filing Date	04/06/01
		First Named Inventor	Unger
		Group Art Unit	1772
		Examiner Name	Unassigned
Sheet 2 of 2	Attorney Docket Number	20174C-003010US	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Gass et al., "Integrated flow-regulated silicon micropump," <u>Sensors and Actuators A</u> , 43335-338 (1994).	
	2	Sohn et al., "Capacitance cytometry: Measuring biological cells one by one," <u>PNAS</u> , 97(20):10687-10690 (2000).	
	3	Zengerle et al., "A Micro Membrane Pump with Electrostatic Actuation," <u>1992 IEEE Conf. on Micro Electro Mechanical Systems</u> , held 2/4-7/92 in Travemunde Germany, pgs. 19-24.	
	4	Zengerle et al., "Performance Simulation of Microminiaturized Membrane Pumps," from 7th International Conference on Solid-State Sensors and Actuators held 6/7-10/93 in Yokohama Japan, pages 106-109.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
PA 3184066 v1

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Documents:

- 1) Supplemental Information Disclosure Statement Under 37 CFR §1.97
and §1.98
- 2) Form PTO/SB/08A/08B
- 3) Return Postcard

Applicant: Unger et al.

Application No.: 09/826,583

Filing Date: April 6, 2001

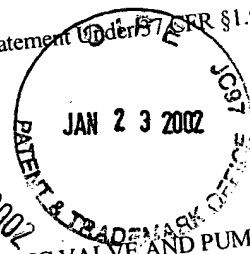
For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
SYSTEMS

Date Due:

Date of Mailing: 12/14/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US



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SYSTEMS

Date Due:

Date of Mailing: 12/14/2001

Attorney: KJT sec. crf

Attorney Docket: 20174C-003010US

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RPTO/SB/21 (08-00)

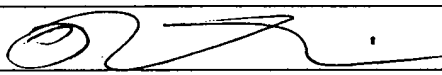
Approved for use through 10/31/2002. OMB 0651-0031

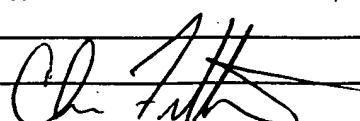
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	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Return receipt postcard
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Firm and Individual name	Townsend and Townsend and Crew LLP Kent J. Tobin Reg No. 39,496
Signature	
Date	December 14, 2001

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PA 3189996 v1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A/08B are being called to the attention of the Examiner. In accordance with CFR §1.98(d), copies of the references can be found in Application No. 09/724,784, filed November 28, 2000 (Attorney docket No. 20174C-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
KJT:crf

PA 3189999 v1

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PTO/SB/08A (08-00)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

of

2

Complete if Known

Application Number	09/826,583
Filing Date	04/06/01
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003010US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		Filing Date	04/06/01
		First Named Inventor	Unger
		Group Art Unit	1772
		Examiner Name	Unassigned
		Attorney Docket Number	20174C-003010US
Sheet	2	of	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Ahn et al., "Fluid Micropumps Based on Rotary Magnetic Actuators," <u>Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95)</u> , held in Amsterdam, Netherlands on 1/29-2/2/95, pgs. 408-412 (1995).	
	2	Benard et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:361-364 (1997).	
	3	Gerlach, T., "Pumping Gases by a Silicon Micro Pump with Dynamic Passive Valves," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:357-360 (1997).	
	4	Jerman, H., "Electrically-Activated, Normally-Closed Diaphragm Valves," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1045-1048 (1991).	
	5	Olsson et al., "Simulation Studies of Diffuser and Nozzle Elements for Valve-less Micropumps," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 2:1039-1042 (1997).	
	6	Shoji et al., "Smallest Dead Volume Microvalves for Integrated Chemical Analyzing Systems," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1052-1055 (1991).	
	7	Vieider et al., "A Pneumatically Actuated Micro Valve with a Silicone Rubber Membrane for Integration with Fluid-Handling Systems," <u>Proceedings of Transducers '95</u> , the 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, held in Stockholm, Sweden on 6/25-29/95, 2:284-286 (1995).	
	8	Xia et al., "Micromolding in Capillaries: Applications in Material Science," <u>J. American Chemical Society</u> , 118:5722-5731 (1996).	
	9	Yang et al., "A MEMS Thermopneumatic silicone Membrane Valve," <u>Proceedings of the IEEE 10th Annual Workshop of Micro Electro Mechanical Systems Workshop (MEMS '97)</u> , held 1/26-30/97 in Nagoya, Japan, pages 114-118 (1997).	

Examiner Signature		Date Considered	
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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PA 3190002 v1

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US Patent Application No. 09/826,583

For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP SYSTEMS

Inventor: Marc Unger

Filed: April 6, 2001

Attorney Docket No.: 20174C-003010US

1. Transmittal Form
2. Communication to Examiner
3. Copy of IDS, transmittal and postcard submitted 12/14/2001
4. Copy of IDS, transmittal and postcard submitted 11/21/2001
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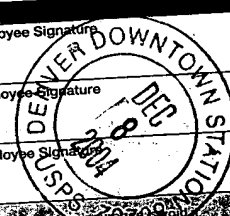
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**TRANSMITTAL
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Total Number of Pages in This Submission

Application Number	09/826,583
Filing Date	April 6, 2001
First Named Inventor	Unger, Marc
Art Unit	3753
Examiner Name	Chambers, A. Michael
Attorney Docket Number	20174C-003010US

ENCLOSURES (Check all that apply)

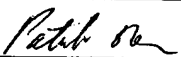
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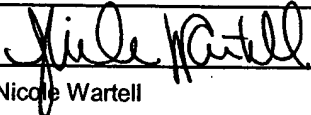
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Patrick M. Boucher		
Date	2004 December 7	Reg. No.	44,037

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TOWNSEND and TOWNSEND and CREW LLP

By: 
Nicole M. Warrell

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Chambers, A. Michael

Art Unit: 3753

COMMUNICATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication provides courtesy copies of the Information Disclosure Statement filed on December 14, 2001. It appears from the Image File Wrapper on the U.S.P.T.O. website and file history that this IDS was never considered by the Examiner. The copy of the IDS provided is identical to that submitted on December 14, 2001. A copy of a date-stamped postcard is also enclosed to show prior receipt of the IDS by the U.S. Patent Office on January 23, 2002. Applicants also enclose herewith

copies of the cited non-patent literature references identical to those cited in the December 14, 2001 IDS for the Examiner's convenience.


Applicants would also like to make the Examiner aware of the November 21, 2001 references that have not been made of record in this application. This communication provides courtesy copies of the Information Disclosure Statement filed on November 21, 2001. The copy of the IDS provided is identical to that submitted on November 21, 2001. A copy of a date-stamped postcard is also enclosed to show prior receipt of the IDS by the U.S. Patent Office on January 4, 2002. The references cited in this particular IDS were submitted to the U.S. Patent Office by hand on January 23, 2004.

Applicants request that cited references from the Information Disclosure Statements submitted on December 14, 2001 and the non-patent literature references submitted on November 21, 2001 be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants request that Examiner Chambers consider these references and provide applicants a checked-off copy of the attached Information Disclosure Statements to show that these references have been considered pursuant to 37 CFR § 1.97.

If the Examiner has any questions regarding this submission, please call the undersigned at 303-571-4000.

Respectfully submitted,


Patrick M. Boucher
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
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Applicant: Unger et al.

Application No.: 09/826,583

Filing Date: April 6, 2001

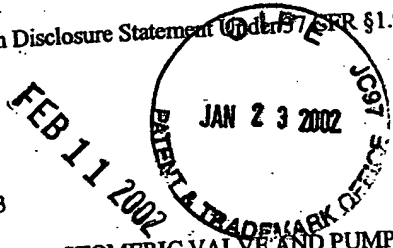
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Applicant: Unger et al.

Application No.: 09/826,583

Filing Date: April 6, 2001

For: MICROFABRICATED ELASTOMERIC VALVE AND PUMP
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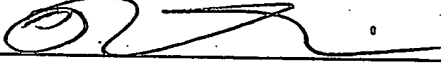
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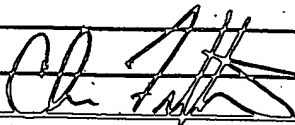
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/826,583	
	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm and Individual name	Townsend and Townsend and Crew LLP Kent J. Tobin Reg No. 39,496
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Date	December 14, 2001

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Signature		Date	December 14, 2001

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98**

Assistant Commissioner for Patents
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Sir:

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Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
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KJT:crf

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

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Application Number 09/826,583
Filing Date 04/06/01
First Named Inventor Unger
Group Art Unit 1772
Examiner Name Unassigned
Attorney Docket Number 20174C-003010US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known	
	Application Number	09/826,583		
	Filing Date	04/06/01		
	First Named Inventor	Unger		
	Group Art Unit	1772		
	Examiner Name	Unassigned		
Sheet	2	of	2	Attorney Docket Number
				20174C-003010US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Ahn et al., "Fluid Micropumps Based on Rotary Magnetic Actuators," <u>Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95)</u> , held in Amsterdam, Netherlands on 1/29-2/2/95, pgs. 408-412 (1995).	
	2	Benard et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:361-364 (1997).	
	3	Gerlach, T., "Pumping Gases by a Silicon Micro Pump with Dynamic Passive Valves," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 1:357-360 (1997).	
	4	Jerman, H., "Electrically-Activated, Normally-Closed Diaphragm Valves," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1045-1048 (1991).	
	5	Olsson et al., "Simulation Studies of Diffuser and Nozzle Elements for Valve-less Micropumps," <u>Proceedings of Transducers '97</u> , 1997 International Conference on Solid-State Sensors and Actuators, held in Chicago, IL, 6/16-19/1997, 2:1039-1042 (1997).	
	6	Shoji et al., "Smallest Dead Volume Microvalves for Integrated Chemical Analyzing Systems," <u>Proceedings of Transducers '91</u> , 1991 International Conference on Solid-State Sensors and Actuators, pages 1052-1055 (1991).	
	7	Vieider et al., "A Pneumatically Actuated Micro Valve with a Silicone Rubber Membrane for Integration with Fluid-Handling Systems," <u>Proceedings of Transducers '95</u> , the 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, held in Stockholm, Sweden on 6/25-29/95, 2:284-286 (1995).	
	8	Xia et al., "Micromolding in Capillaries: Applications in Material Science," <u>J. American Chemical Society</u> , 118:5722-5731 (1996).	
	9	Yang et al., "A MEMS Thermopneumatic silicone Membrane Valve," <u>Proceedings of the IEEE 10th Annual Workshop of Micro Electro Mechanical Systems Workshop (MEMS '97)</u> , held 1/26-30/97 in Nagoya, Japan, pages 114-118 (1997).	

Examiner Signature	Date Considered	
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Applicant: Unger et al.
Application No.: 09/826,583
Filing Date: April 6, 2001

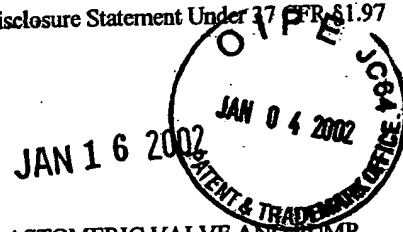
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Attorney: KJT sec. crf

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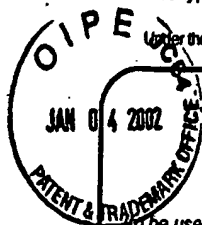
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/826,583	
	Filing Date	04/06/2001	
	First Named Inventor	Unger	
	Group Art Unit	1772	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	1	Attorney Docket Number	2017C4-003010US

ENCLOSURES (check all that apply)		
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Signature	
Date	November 21, 2001

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Marc Unger et al.

Application No.: 09/826,583

Filed: April 6, 2001

For: MICROFABRICATED
ELASTOMERIC VALVE AND PUMP
SYSTEMS

Examiner: Unassigned

Art Unit: 1772

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37 CFR
§1.97 and §1.98**

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A/08B are being called to the attention of the Examiner. In accordance with CFR §1.98(d), copies of the references can be found in Application No. 09/724,784, filed November 28, 2000 (Attorney docket No. 20174C-003000US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

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Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete If Known

Application Number	09/826,583
Filing Date	04/06/01
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003010US

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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Sheet 2 of 2

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Application Number	09/826,583
Filing Date	04/06/01
First Named Inventor	Unger
Group Art Unit	1772
Examiner Name	Unassigned
Attorney Docket Number	20174C-003010US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Gass et al., "Integrated flow-regulated silicon micropump," <u>Sensors and Actuators A</u> , 43335-338 (1994).	
	2	Sohn et al., "Capacitance cytometry: Measuring biological cells one by one," <u>PNAS</u> , 97(20):10687-10690 (2000).	
	3	Zengerle et al., "A Micro Membrane Pump with Electrostatic Actuation," <u>1992 IEEE Conf. on Micro Electro Mechanical Systems</u> , held 2/4-7/92 in Travemunde Germany, pgs. 19-24.	
	4	Zengerle et al., "Performance Simulation of Microminiaturized Membrane Pumps," from 7th International Conference on Solid-State Sensors and Actuators held 6/7-10/93 in Yokohama Japan, pages 106-109.	

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